In re Appln. No ~09/429,331

REMARKS

1. At the time the February 20, 2001, response was prepared, counsel's file copy of the specification was missing page 237. Hence, the sequences appearing on that page were not incorporated into the Sequence Listing filed on that date.

Since counsel received a postcard receipt (copy enclosed) acknowledging the filing of a 293 page specification, counsel assumes that page 237 was missing only from counsel's file copy and not from the original filed with the PTO.

If counsel is mistaken, inserting page 237 at this time does not constitute the addition of "new matter". At page 1, lines 3-10, it is stated:

This application is a continuation-in-part of PCT/US99/06664, filed March 26, 1999, which is a continuation-in-part of 60/115,345, filed January 8, 1999, which is a continuation-in-part of Paige et al., Serial No. 60/099,656, filed September 9, 1998, which is a continuation-in-part of Paige et al., Serial No. 60/082,756, filed April 23, 1998. All of the above applications are hereby incorporated-by-reference.

Page 237 of this application sets forth Table 1, and part of Table 2. It is identical to page 152 of the above-identified, incorporated-by-reference PCT application. Hence, even if inadvertently omitted from this application as filed, it can be provided without adding "new matter".

In re Appln. No 39/429,331

- 2. At page 162, we correct an obvious typographical error in the identification of ambiguous nucleotide "K", which denotes "G" or "T", not "C" or "T". See MPEP \$2422, page 2400-20, Table 1. The NNK codon, specified at page 162, line 33, encodes all 20 amino acids. If the third position were C/T (Y), instead of G/T (K), then Met (ATG), Trp (TGG), Ser (TCA, TCG), Gln (CAA, CAG), Lys (AAA, AAG) and Gly (GAA, GAG) would not be encoded, inconsistent with the identification of X in LXXLL (page 162, line 29) as "any AA". This error was also corrected on page 4 of the Sequence Listing at <223> in SEQ ID NO:14.
 - 3. Applicants hereby submit the following:
 - [XX] an amendment to the paper copy of the "Sequence Listing" submitted on February 20, 2001, the amendment being in the form of substitute pages 1 and 79 and new pages 80-90;
 - [XX] the Sequence Listing in computer readable form, complying with \$1.821(e) and \$1.824, including, if an amendment to the paper copy is submitted, all previously submitted data with the amendment incorporated therein;
- [XX] 4. The description has been amended to comply with \$1.821(d).

In re Appln. No. 429,331

- 5. The undersigned attorney or agent hereby states as follows:
 - this submission is not believed to include new (a) matter [\$1.821(g)];
 - (b) the contents of the paper copy (as amended, if applicable) and the computer readable form of the Sequence Listing, are believed to be the same [\$1.821(f) and \$1.825(b)];
 - (c) if the paper copy has been amended, the amendment is believed to be supported by the specification and is not believed to include new matter [\$1.825(a)]; and

Respectfully submitted, BROWDY AND NEIMARK Attorneys for Applicant(s)

By: Iver P. Cooper Registration No. 28,005

IPC:al 624 Ninth Street, N.W. Washington, D.C. 20001 Telephone No.: (202) 628-5197

Facsimile No.: (202) 737-3528

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Enclosures:

Paper Sequence Listing pp. 1,4 and 79-90 Substitute CRF Substitute page 237 Page 152 of PCT/US99/06664 Copy of stamped postcard receipts

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WO 99/54728

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PCT/US99/06664

Table 1

Peptides the Bind to the Unliganded (unactivated) Estrogen Receptor

	Escroge	- 1	7//		· <u>·</u> ·		•										- ·	
	_								Se	qυ	ler.	ce	:				Phage	#
5	s	R	W	E	s	P	L	G	Т	Ŵ	E	W	S	R			4	
J				P		T	I	s	Н	Y	L	M	Ģ	G			48	
	Ś	s				L	S	D	F	P	W	G	V	S	R	•	1	
	s	S	W	D	R	L	S	Þ	F	Þ	W	G	V	S	R		2	
	s	ŝ	W			L		D	L	P	W	Ģ	Ε	S	R		3	
10	ŝ	s	W	V	L	L	R	D	L	Ъ	W	G	S	R			31	
10	·ŝ	S	W	V	V	L	R	D	L	P	W	Ģ	S	R			29	
	ŝ	S	C	K	W	Y	E	K	C	S	G	L	W	S	R		7	
	Š	s				F			D		C	F	E	S	R		35	
	Ś	R	N	L	C	F	F	W	D	D	E	Y	C	S	R		41	
15.	H	Н	Н	R	H	P	A	H	₽	H	T	Υ	G	G			47	

Table 2

Peptides that Bind to the Estradiol Activated

	Receptor	•
	Sequence	Phage #
••		1/2
20	S R A G L L S D L L E G K S K S S R S L L R D L L M V D S R	6
	SSNKLLYNLLKMESR	22
	SSKSLLLNLLSTPSR	23
		42
		3
25	₩ 30 ₩ = - 17 = -	11
		21
		27
•		28
		29
30		19/20
		30
		15
		34
		35
35		36
	SRLSCLLMGFEDCSR SSKLIRLLTSDEELSR	37
	SSRLMELLQEGQGWSR	40
	SSNHQSSRLIELLSR	4
40	SSRLWQLLASTDTSR	16
40	SSNSMLWKLLAAPSR	13/14
	SSKTLWRLLEGERSR	17
	SRAGPVLWGLLSESR	32
	SSLTSRDFGSWYASR	5
45	SSWVRLSDFPWGVSR	24/25
40	SSEYCFYDSAHCSR	33 .
	SRSLLECHLMGNCSR	7
	SSELLRWHLTRDTSR	8
	SRLEYWLKWEPGPSR	12
50	SRSDSILWRMLSESR	31
20	SSKGVLWRMLAEPVSR	38/39
	HSHGPLTLNLLRSSGG	41
	SSAGGGAPAGSTPSR	26

237

Table 1

	Peptides	the	Bind	to	the	Unliganded	(unactivated)
Estro	gen Recer	otor					

		-			_												•	
									Se	qu	er	ce	:			SEO ID NO:	Phage	#
-	S	Þ	W	E	S	Р	L			Ŵ			S	Ŕ		316	4	
5	s						T.		Н	Y	L	М	G	G		317	48	
		S		v			S				W	G	V	S	R	318	1	
	_	S	W	Ď		L	-	_	•	_		G	V	S	R	319	2	
	•	S	W	I		L				₽			E	S	R	320	3	
		_	M	v.						P		_				321	31	
10		S		v	_	L		_		P	• •	_				322	29	
•	_	_	W		-	Y		_	_	_	• •				R	323	7	
	_		C	.T.	• •	_			מ	G	C			S		324	、35	
	<u> </u>	S	G	<u> </u>		_			D	_	E	-	c	_	R	325	41	
	S	R	N	L	C	F	F	W	-	_		Y	_	Ġ	-	326	47	
15	. H	Н	H	R	Н	₽	A	н	ע	H	T	I	5	5		522	• •	

Table 2

Peptides that Bind to the Estradiol Activated Receptor

	NCCOPOC-		
	Sequence	SEB IDNO:	Phage #
20	SRAGLLSDLLEGKSR	327	1/2
20	SSRSLLRDLLMVDSR	328	6
	SSNKLLYNLLKMESR	329	22
	SSKSLLLNLLSTPSR	330	23
	HSFPRESLLVRLLQGG	331	42
25	SRLEMLLRSETDFSR	332	3
25	SRLEELLKWGSVTSR	333	11
	SRLEQLLKEEFSYSR	334	21
	SRLEQLLRSEPDFSR	335	. 27
	SRLEDLLRAPFTTSR	336	28
30	SRLESLLRFGQLDSR	337	29
30	SSRLLSLLVGDFNSR	338	19/20
	SRLEELLLGTNRDSR	339	30
	SRLKELLLLPTDLSR	340	15
	SRLECLLEGRLNCSR	341	34
35	SSKLYCLLDESYC SR	342	35
33	SRLSCLLMGFEDCSR	343	36
	SSKLIRLLTSDEELSR	344	37
	SSRLMELLQEGQGWSR	345	40
	SSNHOSSRLIELLSR	346	4
40	SSRLWOLLASTDTSR	347	16
40	SSNSMLWKLLAAPSR	348	13/14
	SSKTLWRLLEGERSR	ડ પંદ્ર	17
	SRAGPVLWGLLSESR	350	32
	SSLTSRDFGSWYASR	351	5
45	SSWVRLSDFPWGVSR	3 <i>5</i> 2_	24/25
Ŧ.J	SSEYCFYDSAHCSR	3 <i>5</i> 3	3_3
	SRSLLECHLMGNCSR	3 <i>5</i> ¥	7
	SSELLRWHLTRDTSR	355	8
	SRLEYWLKWEPGPSR	356	12
50	SRSDSILWRMLSESR	357	31
ψŪ	SSKGVLWRMLAEPVSR	3 <i>5</i> ~8	38/39
	HSHGPLTLNLLRSSGG	359	41
	SSAGGGAPAGSTPSR	3 60	26
	•		

SEQUENCE LISTING

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    MCDONNELL, Donald P.
    CHANG, Ching Yu
    NORRIS, John
    HAMILTON, Paul T.
    FOWLKES, Dana M.
    BARNETT, Tom
    CHRISTIANSEN, Dale J.
    BUEHRER, Benjamin
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                   5
 <210> 316
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                  5
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       peptide
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        peptide
  <400> 333
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 <400> 336
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<400> 339
Ser Arg Leu Glu Glu Leu Leu Gly Thr Asn Arg Asp Ser Arg
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                                                           15
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<400> 345
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<213> Artificial Sequence
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